DESCRIPTIONS OF THE NESTS AND EGGS OF THREE SPECIES OF AUSTRALIAN BIRDS.

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1. CRACTICUS RUFESCENS, DeVis.

Rufous Crow-Shrike.

The known range of the Rufous Crow-Shrike extends throughout the coastal scrubs of north-eastern Queensland from the neighbourhood of the Daintree River in the north to the Herbert River in the south. Future research will undoubtedly extend this range both north and south, to all districts of tropical Queensland having a similar flora. Dr. Ramsay first drew attention to this bird at a meeting of the Linnean Society of New South Wales in November, 1877, from specimens obtained by Mr. Kendal Broadbent, near Cairns; but stated that he believed it to be the young of Cracticus quoyi. In Volume II. of the Society's Proceedings, Dr. Ramsay fully describes it, and adds the following note: - "The only thing in favour of this bird being a distinct species is the fact that on six different occasions some of our best taxidermists have collected during the whole season in districts in which C. quoyi is plentiful, without once having met with any bird in a similar stage of plumage." Subsequently* Mr. De Vis described it as a new species, under the name of Cracticus rufescens, from specimens also obtained by Mr. Broadbent in the Tully and Murray River scrubs. It is beautifully figured by Dr. Sharpe in his "Birds of New Guinea"; from examples procured by the late Mr. T. H. Boyer-Bower on the Mulgrave River. Specimens were also obtained by Messrs. Cairn and Grant, who were collecting in the same locality on behalf of the Trustees of the Australian Museum. Mr. Grant

^{*} Proc. Linn. Soc. N.S.W. Vol. vii. p. 562 (1883). + Gould and Sharpe, Birds of New Guinea, Vol. iii. Pl. 16 (1875-88).

informs me that he usually met with this species in low-lying lands, searching for insects among the fallen leaves in open parts of the scrub. It is somewhat remarkable that during a period of eleven months' collecting in that part of Queensland in 1888-9 he never saw two Rufous Crow-Shrikes in company; it was always one Rufous and one Black Crow-Shrike. I have now two birds before me shot while feeding together in the scrub opposite Double Island. One is C. rufescens, the other is C. quoyi, and both are sexed as males. Mr. J. A. Boyd, who has resided fifteen years on the Herbert River, sent me two eggs of the former species, taken on the 26th of October from a nest on which the female was sitting, together with the following note:-"Yesterday a black gin brought me a pair of most peculiar eggs belonging to a species of Cracticus, which the natives call "Kulgo" from its note. The male is a very noisy black bird about the size of Eudynamis, the female brown. There is a great difference between the eggs, though in both the ground colour is very pale green. One is pyriform, with a lot of dark chocolate blotches on the larger end, and a band of green around the middle; the other is oval in form, a few ink-like marks taking the place of the blotches on the larger end, and the band around the middle is absent. The nest, which was built between the trunk and a couple of branches of a small tree overhanging Ripple Creek, was a simple construction of twigs without lining, and showing daylight all through. Both eggs are heavily incubated, and one is broken in two places by the gin's teeth, as she brought them down from the nest in her mouth." The eggs forwarded by Mr. Boyd are as described by him, and are only distinguishable from those of C. quoyi by being slightly larger, of a paler green ground colour, and rather more conspicuously marked. The narrow green band around the centre of one egg is purely an accidental marking; I have seen similar bands on the eggs of other species. Length (A) 1.45×1.05 inch; (B) 1.43×1.03 inch.

In a subsequent letter, Mr. Boyd writes:—"Why this *Cracticus* is called *ru/escens*, I do not know; certainly the female is reddishbrown, but the male is jet black." Owing to these birds being

by no means common on the Herbert River, Mr. Boyd has been unable to grant my request for a pair shot at the nest. He has, however, forwarded a fledgeling, which was captured by a Kanaka girl on the plantation on the 26th of November, 1895. This specimen is almost similar in the character of its markings to the fully adult C. rufescens, but it is darker in colour, and the rufous centres of the feathers on the upper surface are broader and of a deeper tint than in the adult; wings and tail dark brown; all the under surface light rufous, the feathers on the lower neck edged and tipped with blackish-brown; total length 8.5 inches, wing 4.5, tail 2.8, bill 1.4, tarsus 1.5. I have not seen the young of C. quoyi, but it is described in the Catalogue of Birds in the British Museum* as being smoky-black. Upon the authority of Mr. Broadbent, and the late Mr. F. H. Boyer-Bower, Mr. De Vis and Dr. Sharpe respectively agree in describing the sexes of C. rufescens, as being nearly alike in colour. Why a Rufous and a Black Crow-Shrike should be always seen together, if not a sexual distinction of one species, is a mystery to me, and I look forward to our energetic member, Mr. Boyd, to solve it.;

2. Sphenura broadbenti, McCoy.

Rufous-headed Bristle-bird.

This fine Bristle-bird was discovered in 1858 in a dense scrub about twenty-four miles from Portland Bay, Victoria, by Mr. Kendal Broadbent, who presented a single example of it to the National Museum, Melbourne. It was first described by Sir Frederick McCoy in the Annals and Magazine of Natural History in March, 1867, who named it in honour of its discoverer. Sub-

^{*} Gadow, Cat. Bds. Brit. Mus. Vol. viii. p. 95 (1883).

⁺ Since the above was sent to press, Mr. W. S. Day, who has been collecting in the neighbourhood of Cairns for the past seven years, writes me as follows: "Cracticus rufescens is fairly common at Riverstone, sixteen miles inland from Cairns. I have shot a lot of them, but got very few on top of the range. The female is always brown and so is the young male, but the old male is black."

sequently the specimen from which his description was taken was forwarded to England to Mr. Gould, who figured it in his "Supplement to the Birds of Australia." For many years after but few of these birds had been obtained, and in 1883 evidently there was not an example of it in the British Museum when Dr. Sharpe prepared the seventh volume of the Catalogue of Birds, for on page 106 he there transcribes Sir Frederick McCov's original description and his accompanying note giving the locality where the bird had been procured. By some oversight, however, Dr. Sharpe has erroneously recorded the habitat of this species as the "Interior of South Australia." The Rufous-headed Bristle bird is exclusively confined to the dense scrubs of south-western Victoria, and is probably more abundantly distributed in the ranges and gullies of the Otway Forest than elsewhere. The settlement of portion of this area, and the forming of marine resorts at Loutit and Apollo Bays, has proved that this bird is by no means a rare species, although, like its congeners, it keeps out of sight as much as possible, and its note is more often heard than the bird is seen. Two nests of this species found in the thick undergrowth of gullies in the Otway Forest were oval-shaped structures somewhat loosely put together with an entrance at the side, and were made externally of dried plant-stems, wiry fibrous roots and dried grasses, the inside being almost exclusively lined with rootlets. These nests were found in November, and each contained two fresh eggs. Two eggs now before me are of a dull purplish-white ground colour, one specimen having numerous freckles and spots of purplish-brown evenly distributed over the surface of the shell, and the larger end slightly tinged with slatygrey; the other is similar in colour, but is more finely and thickly marked, and has a darker cap of confluent markings on the larger end. These eggs are in form slightly swollen ovals, and are very thin-shelled. Length (A) 1.07×0.84 inch; (B) 1.09×0.85 inch.

In the original description of this species in the Annals and Magazine of Natural History, and which has been transcribed by Mr. Gould in his "Supplement to the Birds of Australia," the length is there given as 7 inches 9 lines. A young female now

before me measures from the tip of the bill to the end of the longest tail feathers 9.9 inches.

3. DENDROCYGNA EYTONI, Gould.

Eyton's Tree Duck.

The range of Eyton's Tree Duck extends throughout the Australian colonies, but it is more sparingly distributed in the southern portions of the continent. In Tasmania and New Zealand it is only known as a very rare accidental visitor. After an abundant rainfall it is unusually plentiful on the Barwon, Warrego, and Macquarie Rivers in north-western New South Wales, but it is seldom seen in dry seasons. It is exclusively a fresh-water duck, and is generally met with in the shallow water near the margins of swamps and rivers, except during the breeding season, when it resorts to well grassed country some distance from water. Living chiefly on a vegetable diet, which consists principally of the tender buds of various aquatic plants, and grasses, its flesh is much esteemed as an article of food, and for delicacy of flavour is considered by some to surpass that of any other duck inhabiting Australia. Although vernacularly called Tree Ducks-but more commonly known as Whistling Ducks, from their peculiar sibilant note uttered only while on the wing —it is somewhat remarkable that the two species of Dendrocygna found in Australia should both nest on the ground, while all other members of this genus, with the exception of D. javanica, of India, resort to hollow limbs of trees, or build nests of sticks, if the deserted tenement of a crow, heron, or other bird is not available. For an opportunity of examining and describing the eggs of Eyton's Tree Duck, I am indebted to an ardent sportsman and cologist, who found these birds breeding near that famous resort of wild fowl, the Macquarie Marshes. While shooting at Bucklinguy on the 23rd of September, 1893, in the long cane grass, about one-third of a mile from an anabranch of the Macquarie River, he flushed one of these birds, which he quickly fired at, and it fell. As he moved forward to pick it up, he

almost stepped on the nest which was built at the side of a tussock of cane grass. It was a slight hollow in the soil, lined only with short pieces of cane grass, and contained nine fresh eggs. Evidently the ducks had just begun to lay, for although twelve of them were obtained, only one more nest was found that day, which was similarly constructed and had two fresh eggs in it. Later on in the same locality another nest was found containing seven fresh eggs. From these nests the ducks had made runs or tracks through the long grass to the water's edge. All of the eggs when found were immaculate, and entirely free from the usual feet marks of the female or stain of any kind. Two average eggs from the set of nine are oval in form, tapering somewhat sharply towards the smaller end, and are comparatively small for the size of the bird. In colour they are milk-white, with an almost imperceptible tinge of cream; smooth in texture, and having a slight satiny lustre. The shell is thick and exceedingly hard, and the finder of the nests compared it to flint when he was engaged in drilling the eggs. Length (A) 1.92×1.36 inch; (B) 1.88 × 1.36 inch. These eggs may be easily distinguished from those of any member of the family Anatidæ inhabiting Australia, by their being almost pure white. When held in the hand, and the shells are rubbed together, the sound produced is the same as if they were made of porcelain.